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B-meson semileptonic decays from highly improved staggered quarks

Monday, July 31, 2023 4:00 PM (20 minutes)

We present an update for results on B-meson semileptonic decays using the highly improved staggered quark (HISQ) action for both valence and 2+1+1 sea quarks. The use of the highly improved action, combined with the MILC collaboration's gauge ensembles with lattice spacings down to ~0.03 fm, allows the b quark to be treated with the same discretization as the lighter quarks. The talk will focus on updated results for $B_{(s)} \to D_{(s)}$, and $B_{(s)} \to K$ scalar and vector form factors.

Topical area

Quark and Lepton Flavor Physics

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